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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/735,039	12/12/2000	Yuji Furuta	14139	4559

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EXAMINER	
ONUAKU, CHRISTOPHER O	

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/735,039	FURUTA, YUJI	
	Examiner	Art Unit	
	Christopher Onuaku	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 March 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6-12 and 14-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6-12 and 14-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1&9 have been considered but are moot in view of the new ground(s) of rejection.

It is pertinent to point out that Sugisaki et al disclose a video signal scrambling apparatus that includes a compression encoding circuit that divides each frame of a digital video signal into rectangular (horizontal direction/vertical direction or coordinates) blocks of data, forms macroblocks from the rectangular blocks of data by aggregating a predetermined number of the blocks of data to form each of the macroblocks, shuffles positions of the macroblocks within the frame of the digital signal, and performs discrete cosine transform (DCT) processing block-by-block on the rectangular blocks of data making up the shuffled macroblocks. This compression-encoding circuit scrambles the digital video signal by arranging the rectangular blocks of data making each macroblock at positions within the macroblock that are different from the standard positions for the rectangular blocks of data Therefore, from the above discussions, Sugisaki et al clearly disclose wherein the reverse section specifies a reverse position by means of coordinates within each unit block of image information.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4,6,7,9-12,14&15 are rejected under 35 U.S.C. 102(b) as being anticipated by Sugisaki et al (US 5,535,275).

Regarding claim 1, Sugisaki et al disclose a technique for preventing unauthorized copying of an an analog television signal by a digital video tape recorder, including a technique in which a scrambled signal is recorded when copying of an analog input signal is not authorized, comprising a reverse section for reversing a specific code by means of a code stream of the image information, an outputting it after reducing image quality of the image information by means of reverse of one code or a plurality of codes (see Fig.10&11; shuffling circuit 21 of Fig.10 of the compression coding circuit 14 of Fig.11; col.5, line 63 to col.6, line 47; col.7, line 50 to col.9, line 48, which discloses the function of the shuffling circuit 21 as the compression coding circuit 14 performs the compression coding function; and col.9, line 50 to col.11, line 46, which discloses some specific examples of scrambling techniques as performed by the shuffling circuit 21), here the function of the shuffling circuit (scrambling circuit) 21 is to reduce the image quality of an image in order to make the image less recognizable when an unauthorized copying of the image is made, by changing the order of the macroblocks as shown in Fig.13 in col.8, line 40 to col.9, line 22); wherein the reverse section specifies a reverse position by means of coordinates within each unit block of image information (see Fig.10&11 and compression coding circuit 14; col.2, lines 34-49 and col.7, line 50 to col.8, line 40), here Sugisaki et al disclose a video signal scrambling apparatus that includes a compression encoding circuit that divides each frame of a digital video signal into rectangular (horizontal direction/vertical

direction or coordinates) blocks of data, forms macroblocks from the rectangular blocks of data by aggregating a predetermined number of the blocks of data to form each of the macroblocks, shuffles positions of the macroblocks within the frame of the digital signal, and performs discrete cosine transform (DCT) processing block-by-block on the rectangular blocks of data making up the shuffled macroblocks. This compression-encoding circuit scrambles the digital video signal by arranging the rectangular blocks of data making each macroblock at positions within the macroblock that are different from the standard positions for the rectangular blocks of data

Regarding claim 2, Sugisaki et al disclose wherein the reverse section reverses a code on a coefficient table of discrete cosine transform (see col.10, line 56 to col.11, line 4).

Regarding claim 3, Sugisaki et al disclose wherein the reverse section reverses a code within a range in which a code stream can be combined by means of a digital information compression technology without changing the data length of the code stream (see Fig.4A&4B; col.10, lines 12-27).

Regarding claim 4, Sugisaki et al disclose wherein the reverse section changes a deterioration degree of image quality by specifying a reverse position of a code (see col.10, line 56 to col.11, line 4 and col.11, lines 38-46).

Regarding claim 6, Sugisaki et al disclose wherein the reverse section conducts image quality reduction of image information by dividing it into two steps or more than or equal to three steps (see col.9, lines 54-67, and col.11, lines 38-46).

Regarding claim 7, Sugisaki et al disclose wherein the reverse section conducts image quality reduction for at least one of a Y component, a Cr component and a Cb component of image information (see Fig.12A-12C; col.7, line 50 to col.8, line 45 and col.11, lines 38-46).

Regarding claim 9, the claimed limitations of claim 9 are accommodated in the discussions of claim 1 above.

Regarding claim 10, the claimed limitations of claim 10 are accommodated in the discussions of claim 2 above.

Regarding claim 11, the claimed limitations of claim 11 are accommodated in the discussions of claim 3 above.

Regarding claim 12, the claimed limitations of claim 12 are accommodated in the discussions of claim 4 above.

Regarding claim 14, the claimed limitations of claim 14 are accommodated in the discussions of claim 6 above.

Regarding claim 15, the claimed limitations of claim 15 are accommodated in the discussions of claim 7 above.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 8&16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugisaki et al in view of Aucsmith et al (US 5,991,403).

Regarding claim 8, Sugusaki et al fail to explicitly disclose wherein the reverse section has a random number generator for generating a random number for designating existence of code

Aucsmith et al teach methods for processing video data, including methods for encrypting video data for display on processor-based video systems wherein when a GOP is detected, an encryption key is generated, for example, by a random number generator or a comparable device (see Fig.5; col.10, lines 5-18)

It would have been obvious to one of ordinary skill in the art to further add scrambling means with a random number generator to Sugisaki for designating the existence of code reverse, since this would add yet another alternate scrambling technique, again, as taught by Aucsmith.

Regarding claim 16, the claimed limitations of claim 16 are accommodated in the discussions of claim 8 above.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher O. Onuaku whose telephone number is (571) 272-7379. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on 571-272-7950 The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

COO

6/22/05

James J. Groody
Supervisory Patent Examiner
Art Unit ~~262~~ 2616